

US006636808B1

(12) United States Patent

Brown et al.

(10) Patent No.:

US 6,636,808 B1

(45) Date of Patent:

Oct. 21, 2003

(54) MANAGING AN ENVIRONMENT VIA A UNIVERSALLY ACCESSIBLE SERVER

(75) Inventors: Michael Wayne Brown, Georgetown, TX (US); Kelvin Roderick Lawrence, Round Rock, TX (US); Michael A.

Paolini, Round Rock, TX (US)

(73) Assignee: International Business Machines Corporation, Armonk, NY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/560,161

(22) Filed: Apr. 28, 2000

(51) Int. Cl.⁷ G01W 1/02

702/99, 33; 236/1 C, 44 R, 44 A, 91 R, 91 C, 91 D, 91 E, 91 F, 94, 99 A, 99 E; 374/10, 110, 11; 432/36; 700/9, 17, 83, 108, 298, 299

(56) References Cited

U.S. PATENT DOCUMENTS

4,388,616	Α	6/1983	Machida
4,897,798	Α	1/1990	Cler
4,916,642	Α	4/1990	Kaiser et al.
5,170,935	Α	12/1992	Federspiel et al.
5,204,961	Α	4/1993	Barlow
5,311,451	Α	5/1994	Barrett
5,410,471	Α	4/1995	Alyfuku et al.
5,544,036	Α	8/1996	Brown, Jr. et al.
5,604,800	Α	2/1997	Johnson et al.
5,621,662	Α	4/1997	Humphries et al.
5,682,949	Α	11/1997	Ratcliffe et al.
5,742,920	Α	4/1998	Cannuscio et al.
5,751,916	Α	5/1998	Kon
5,761,085	Α	6/1998	Giorgio
			-

5,793,646	Α	8/1998	Hibberd et al.
5,798,945	Α	8/1998	Benda
5,848,378	Α	12/1998	Shelton et al.
5,860,068	Α	1/1999	Cook
5,892,690	Α	4/1999	Boatman et al.
5,971,597	Α	10/1999	Baldwin et al.
6,055,480	Α	4/2000	Nevo et al.
6,216,956	B 1	4/2001	Ehlers et al.

OTHER PUBLICATIONS

Daniel Hays; "Smoke Detectors in Cyberspace"; Jul. 1997. IECON '98; Michael Pauly; "Monitoring Indoor Environment Using Intelligent Mobile Sensors".

Primary Examiner—Marc S. Hoff Assistant Examiner—Edward Raymond (74) Attorney, Agent, or Firm—Marilyn Smith Dawkins; Bracewell & Patterson, L.L.P.

(57) ABSTRACT

According to the present invention, environment indicators computed for a particular environment are converted into a common transmittable data format, wherein each of the environment indicators is computed by an electronic environment measurement device from among multiple diverse electronic environment measurement devices. The environment indicators are transmitted in the transmittable data format to a universally accessible server system in association with a particular universal identifier for a particular user. The universally accessible server system analyzes each of the environment indicators according to an environment sensitivity profile stored within the universally accessible server system in association with the universal identifier. Control signals are determined at the universally accessible server system for adjusting multiple environment control systems that control the particular environment in response to the analysis. The particular environment is adjusted as controlled by the environment control systems according to the control signals, such that a particular environment is temporarily managed via a universally accessible server system according to an environment sensitivity profile associated with a particular user.

55 Claims, 10 Drawing Sheets

